

# Adenoidectomy - Single Service Clinical Guidelines for Medical Necessity Review

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#### **Guideline Information:**

**Specialty Area:** Otolaryngology

Guideline Name: Adenoidectomy - Single Service

Literature review current through: 12/15/2023

**Document last updated:** 12/15/2023

**Type:**  $[\underline{\mathbf{X}}]$  Adult (18+ yo) |  $[\underline{\mathbf{X}}]$  Pediatric (0-17yo)

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# **Medical Necessity Criteria**

#### Service: Adenoidectomy

#### **General Guidelines**

- Units, Frequency, & Duration: None.
- Criteria for Subsequent Requests: None.
- **Recommended Clinical Approach:** Adenoidectomy treats sleep-disordered breathing, nasal airway obstruction, recurrent acute otitis media, and chronic rhinosinusitis. Outcomes are excellent, and adverse effects are uncommon.<sup>1</sup>
- **Exclusions:** Active local infection, anemia and disorders of hemostasis, hemoglobin concentration that is less than 10 g/dL, hematocrit concentration that is less than 30 percent, cleft palate, or neurologic or neuromuscular abnormalities that affect palatal function.

#### **Medical Necessity Criteria**

#### **Indications**

- → **Adenoidectomy** is considered appropriate if **ANY** of the following is TRUE:<sup>2-3</sup>
  - ◆ Acute otitis media and **ALL** of the following:<sup>4</sup>
    - The child is age two years or older; AND
    - Previous tympanostomy tubes are no longer in place; OR
  - ◆ Adenoiditis that is unresponsive to at least two courses of antibiotics (one course should be at least two weeks of a B-lactamase stable antibiotic)<sup>5</sup>; **OR**
  - Adenoid regrowth and revision adenoidectomy is needed due to recurrent symptoms<sup>6</sup>; OR
  - ◆ Cardiopulmonary complications (e.g., cor pulmonale, pulmonary hypertension, right ventricular hypertrophy associated with upper airway obstruction)<sup>5</sup>; **OR**
  - ◆ Chronic rhinosinusitis and **ALL** of the following:<sup>Z-8</sup>
    - Age 12 years or younger; AND
    - Imaging or endoscopic evidence of rhinosinusitis; AND
    - The patient does not respond to medical therapy, including
      ALL of the following:<sup>9</sup>
      - Nasal corticosteroids; AND
      - Nasal saline irrigation; AND
    - Symptoms that last three months or longer and; AND

- Symptoms that impact the patient (e.g., cough, nasal congestion, rhinorrhea, irritability, behavioral issues); OR
- Dental malocclusion or orofacial growth disturbance documented by orthodontist or dentist<sup>5</sup>; OR
- ♦ Hyponasal speech<sup>5</sup>; OR
- ◆ Obstructive sleep apnea (OSA) and **ALL** of the following: 10-15
  - Adenotonsillar hypertrophy as evidenced by ANY of the following:
    - Lateral radiography of the head (or, if available, other imaging modalities, such as CT or MRI)<sup>24</sup>; OR
    - Physical examination, nasopharyngoscopy or nasal endoscopy; AND
  - OSA that is indicated by ANY of the following:<sup>16</sup>
    - Polysomnography findings that confirm diagnosis and ANY of the following:
      - Adult with apnea-hypopnea index of five or greater; OR
      - Child or adolescent with apnea-hypopnea index of one or greater; OR
    - The patient is unable to do a sleep study in a medical facility or home sleep apnea testing and documentation suggests sleep-disordered breathing by ALL of the following:<sup>17</sup>
      - Daytime sleepiness that is severe; AND
      - Mouth breathing while awake that is audible;
        AND
      - Observed sleep apnea episodes.
- ◆ Otitis media with effusion and **ALL** of the following are **TRUE**:<sup>4-5,18-19</sup>
  - The patient is a child between the ages of 4 and 17 years old<sup>24</sup>; AND
  - A history of prior failed tube tympanostomy and no evidence of nasal obstruction, recurrent sinusitis, or chronic sinusitis, and when done in conjunction with myringotomy or tube tympanostomy; AND
  - The symptoms have lasted three months or longer; AND
  - High-risk middle ear effusion as evidenced by ANY of the following:<sup>4</sup>
    - Adhesive otitis<sup>20</sup>; OR
    - Autism spectrum disorder; OR
    - The child has an increased risk of repeat infection (e.g., attends daycare); OR
    - Craniofacial abnormality (e.g., cleft palate, Down syndrome); OR <sup>21-22</sup>
    - o Developmental delay or intellectual disability; **OR**
    - o Eardrum structural abnormality; OR

- Hearing loss that impacts daily activities; OR
- o Language delay; OR
- o Ossicular erosion; OR
- o Presence of retractile pockets; OR
- Presence of symptoms (e.g., pain, pressure); OR
- Visual impairment that is uncorrectable; AND
- Adenoid pathology results in a clinical syndrome as evidenced by ANY of the following:
  - Confirmation by nasopharyngoscopy or nasopharyngeal radiography that the adenoids result in a post-nasal obstruction; OR
  - o Recurrent adenoiditis that occurs during effusion; OR
- Performed with tonsillectomy in children; OR
- Purulent rhinorrhea as evidenced by ALL of the following:<sup>5</sup>
  - The child is age 12 or younger; AND
  - Four or more episodes in the previous 12 months; AND
  - Documentation of one episode by intranasal examination or diagnostic imaging; OR
- Sleep disturbance with nasal airway obstruction that is present for three months or more.<sup>5</sup>

#### **Non-Indications**

- → Adenoidectomy is not considered appropriate if ANY of the following is TRUE:
  - ◆ Active local infection; **OR**
  - Disorders of hemostasis; OR
  - ◆ Cleft palate; **OR**
  - ◆ Hemoglobin concentration that is less than 10 g/dL; OR
  - ◆ Hematocrit concentration that is less than 30 percent; **OR**
  - Neurologic or neuromuscular abnormalities that affect palatal function; OR
  - Children less than 4 years of age with acute or recurrent otitis media.

## **Level of Care Criteria**

Outpatient.

## Procedure Codes (HCPCS/CPT)

HCPCS/CPT Code	Code Description
42820	Adenoidectomy and tonsillectomy; younger than age 12
42821	Tonsillectomy and adenoidectomy; age 12 or over
42830	Adenoidectomy, primary; younger than age 12
42831	Adenoidectomy, primary; age 12 or over
42835	Adenoidectomy, secondary; younger than age 12
42836	Adenoidectomy, secondary; age 12 or over

## **Medical Evidence**

Schupper et al. (2018) note that adenoidectomy has the best outcomes for patients with sleep-disordered breathing from nasal airway obstruction, ear disease, and pediatric chronic rhinosinusitis. The procedure alone is effective for children under age 7 who are not obese, who have moderate obstructive sleep apnea (OSA), and have small tonsils. Research demonstrates that children over the age of 4 benefit from adenoidectomy at the time of tympanostomy tube placement.<sup>1</sup>

Bitners et al. (2020) performed a review on the evaluation and management of children with OSA syndrome (OSAS). Children who present with symptoms (e.g., snoring, restless sleep, and daytime hyperactivity) or risk factors (e.g. neurologic, genetic, and craniofacial disorders) should be referred for additional evaluation (e.g., sleep specialist, pediatric otolaryngologist, overnight polysomnography). Patients may benefit from anti-inflammatory medications, weight loss, and oral appliances. Post-operatively, children should be monitored for continued symptoms. Management may include positive airway pressure ventilation or other surgical procedures. Special considerations are included for the following scenarios of managing OSAS:<sup>23</sup>

- Residual OSAS after adenotonsillectomy (AT)
- Children with complex comorbidities including obesity, Down syndrome, craniofacial disorders, and neurologic disorders.

#### National and Professional Organizations

The American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS) published a position statement on *Tonsil and Adenoid Surgery*. One technique is not recommended over another. Providers are encouraged to "review their success and complications with their chosen technique to maximize safety, consistency, and surgical efficacy for patients undergoing tonsil and adenoid surgery."<sup>24</sup>

The National Institute for Health and Care Excellence (NICE) published an interventional protocol on *Adenoidectomy for Otitis Media with Effusion (OME) in Children.* "Adenoidectomy may reduce the persistence of OME, although evidence about the effect of this on hearing is unclear." <sup>25</sup> A guideline was also published titled *Evidence Reviews for Adenoidectomy for Children with OME.* The effects of the procedure are assessed – alone or through ventilation tubes (grommets). Randomized controlled trials (RCTs) and quasi-randomised trials were reviewed – NICE recommends "adjuvant adenoidectomy for children over 4 years of age as it improves the efficacy of ventilation tubes". <sup>26</sup>

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# Clinical Guideline Revision History/Information

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